

---

U.S. Department of the Interior • U.S. Geological Survey

# MINERAL INDUSTRY SURVEYS

---

Gordon P. Eaton, Director

Reston, VA 20192

---

For information, contact:

Joyce Ober, Commodity Specialist

Telephone: (703) 648-7717, Fax: (703) 648-7722

E-mail: [jober@usgs.gov](mailto:jober@usgs.gov)

Maria Arguelles, Statistical Assistant

Telephone: (703) 648-7990

E-mail: [marguell@usgs.gov](mailto:marguell@usgs.gov)

MINES-DATA: (703) 648-7799

MINES FaxBack: (703) 648-4999

Internet: <http://minerals.er.usgs.gov/minerals>

## SULFUR IN MARCH 1997

During the month, production of combined Frasch and recovered elemental sulfur was 915,000 metric tons, according to the U.S. Geological Survey. March production was 14% higher than that of February 1997 and 7% higher than that of March 1996. Shipments of these combined products were 14% higher than those of February 1997.

Import and export data for March 1997 were not available at

the time of publication. Import/export data and apparent consumption for March 1997 will be published in the April 1997 Sulfur Mineral Industry Surveys. Imports of recovered sulfur for February 1997 were 122,000 tons. Exports of sulfur, for the same period, were less than 1,000 metric tons. Imports of sulfuric acid for February 1997 were 139,000 tons; exports were 7,000 tons.

TABLE 1  
SALIENT SULFUR STATISTICS 1/

(Thousand metric tons)

Period	Production				Shipments, all sources
	Frasch	Petroleum 2/	Natural gas 3/	Total 3/	
1996	W	5,370	4,970	10,300	10,400
Jan.-Mar. 1996	W	1,270	1,290	2,560	2,530
1996:					
March	W	430	424	854	835
April	W	449	423	872	898
May	W	467	422	889	863
June	W	416	397	813	763
July	W	433	427	860	832
August	W	468	432	900	917
September	W	440	401	841	872
October	W	466	412	878	885
November	W	481	354	835	858
December	W	484	413	897	949
1997:					
January	W	444	425	869	872
February	W	393	407	800	798
March	W	448 p/	467 p/	915 p/	907 p/
Total	W	1,290	1,300	2,580	2,580

p/ Preliminary. W Withheld to avoid disclosing company proprietary data; included with "Natural gas."

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes a small quantity from coking operations.

3/ Includes data from Frasch producers.

TABLE 2  
U.S. IMPORTS OF SULFUR 1/

(Thousand metric tons and thousand dollars)

Period	Canada		Mexico		Total, all countries 2/	
	Quantity	Value 3/	Quantity	Value 3/	Quantity	Value 3/
1996:	1,090	31,000	467	21,200	1,730	61,600
Jan.-Feb. 1996	192	8,920	55	2,690	285	14,100
1996:						
February	96	4,140	37	1,910	150	7,080
March	93	2,480	37	1,720	130	4,680
April	82	2,220	37	1,990	119	4,660
May	119	2,400	37	1,280	186	5,520
June	114	2,100	36	1,760	180	4,860
July	111	4,610	36	1,680	148	6,700
August	80	1,590	57	2,510	157	4,910
September	59	1,380	58	2,470	135	4,410
October	92	2,170	19 e/	826	111	3,110
November	81	1,740	40	1,750	155 e/	4,670
December	66	1,350	57	2,510	123	3,950
1997:						
January	74	1,440	60	2,730	134	4,360
February	82	1,870	41	3,220	122	5,290
Total	156	3,310	101	5,950	256	9,650

e/ Estimated.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

Source: Bureau of the Census; as adjusted by U.S. Geological Survey.

TABLE 3  
U.S. IMPORTS OF SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Canada			Europe			Total 2/		
	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/	Quantity	Sulfur content	Value 3/
1996:	1,600	522	41,000	210	69	2,520	2,080	682	48,500
Jan.-Feb. 1996	222	73	6,120	20	7	345	332	109	7,670
1996:									
February	110	36	2,700	11	4	232	188	62	3,550
March	144	47	3,900	35	12	466	199	65	4,510
April	126	41	3,620	40	13	421	202	66	4,350
May	147	48	3,990	20	7	223	192	63	4,510
June	113	37	2,670	21	7	160	140	46	3,460
July	106	35	2,770	21	7	86	132	43	3,210
August	127	41	3,260	11	3	176	138	45	3,620
September	156	51	3,760	19	6	70	195	64	4,160
October	144	47	3,690	--	--	--	161	53	3,890
November	166	54	3,900	10	3	79	223	73	4,330
December	146	48	3,360	13	4	496	167	55	4,860
1997:									
January	108	35	3,080	13	4	207	145	47	4,650
February	135	44	3,320	--	--	--	139	45	4,250
Total	243	79	6,400	13	4	207	284	92	8,900

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include other countries not listed.

3/ Declared customs valuation.

Source: Bureau of the Census.

TABLE 4  
U.S. EXPORTS OF SULFUR AND SULFURIC ACID 1/

(Thousand metric tons and thousand dollars)

Period	Sulfur		Sulfuric Acid		
	Quantity	Value 2/	Quantity	Sulfur content	Value 2/
1996:	913	51,700	117	38	12,300
Jan.-Feb. 1996	184	14,700	19	6	2,180
1996:					
February	82	7,080	6	2	805
March	66	1,590	10	3	900
April	120	6,720	7	2	938
May	15	2,330	9	3	1,080
June	124	4,990	8	3	785
July	62	3,160	9	3	978
August	139	7,280	12	4	1,090
September	36	1,910	12	4	1,080
October	92	3,760	12	4	1,440
November	59	3,510	10	3	869
December	16	1,810	9	3	1,020
1997:					
January	10	746	11	4	1,170
February	(3/)	15	7	2	834
Total	10	761	18	6	2,010

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Declared f.a.s. (free alongside ship) valuation.

3/ Less than 1/2 unit.

Source: Bureau of the Census.

TABLE 5  
U.S. CONSUMPTION OF SULFUR 1/

(Thousand metric tons)

Period	Domestic sources 2/	Imports	Consumption
1996:	9,460	1,730	11,200
Jan.-Feb. 1996	1,510	285	1,800
1996:			
February	733	150	883
March	769	130	899
April	778	119	897
May	848	186	1,030
June	639	180	819
July	770	148	918
August	778	157	935
September	836	135	971
October	793	111	904
November	799	155 e/	954
December	933	123	1,060
1997:			
January	862	134	996
February	798	122	920
Total	1,660	256	1,920

e/ Estimated.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Calculated as shipments minus exports.

TABLE 6  
RECOVERED SULFUR PRODUCED AND SHIPPED IN THE UNITED STATES,  
BY PAD (PETROLEUM ADMINISTRATION FOR DEFENSE) DISTRICT 1/

(Thousand metric tons)

District and source	March 1997 p/		February 1997		Total 1997 2/		Total 1996	
	Production	Shipments	Production	Shipments	Production	Shipments	Production	Shipments
PAD 1:								
Petroleum and coke	8	8	7	7	24	24	217	225
Natural gas	13	13	17	16	44	45	51	51
Total	21	21	24	23	68	69	267	276
PAD 2:								
Petroleum and coke	69	68	77	79	234	237	927	925
Natural gas	4	3	3	3	8	8	50	49
Total	73	71	81	83	243	246	977	975
PAD 3: 3/								
Petroleum and coke	269	259	218	217	755	760	3,140	3,110
Natural gas 4/	359	363	306	312	984	979	3,860	3,920
Total 5/	628	622	524	529	1,740	1,740	7,000	7,030
PAD 4 and 5: 6/								
Petroleum and coke	102	107	91	85	271	274	1,090	1,100
Natural gas	91	86	81	79	263	250	1,010	992
California	82	87	71	65	210	212	828	834
Total	194	193	172	164	533	524	2,100	2,090
Grand total	915	907	800	798	2,580	2,580	10,300	10,400

p/ Preliminary.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ May include revisions to prior months.

3/ Includes Puerto Rico and the U.S. Virgin Islands.

4/ Frasch production is included in the natural gas production to avoid disclosing company proprietary data.

5/ Includes data from Frasch producers.

6/ Quantities produced and shipped in California included in petroleum and natural gas. California total shown for information purposes only.

TABLE 7  
COMPARATIVE SULFUR AND SULFURIC ACID STATISTICS 1/

(Million metric tons per year [annualized basis] and dollars per metric ton for period shown)

	1997			1996
	March	February	Year to date	Total
Production	10.80 p/	10.40	10.50	10.30
Shipments	10.70 p/	10.40	10.50	10.40
Exports of sulfur	NA	(2/)	0.06	0.91
Imports of sulfur:				
Canada	NA	1.07	0.97	1.09
Mexico	NA	0.53	0.62	0.47
Total	NA	1.59	1.58	1.73
Exports of H <sub>2</sub> SO <sub>4</sub>	NA	0.09	0.11	0.12
Imports of H <sub>2</sub> SO <sub>4</sub> :				
Canada	NA	1.76	1.50	1.60
Europe	NA	--	0.08	0.21
Total 3/	NA	1.81	1.76	2.08
Consumption: 4/				
Domestic sources	NA	10.40	10.30	9.46
Imports	NA	1.59	1.58	1.73
Total	NA	12.00	11.90	11.20
Sulfur export values 5/	NA	--	\$76	\$57
Sulfur import values: 5/				
Canada	NA	\$23	\$21	\$28
Mexico	NA	\$79	\$59	\$45
Average	NA	\$43	\$38	\$36
H <sub>2</sub> SO <sub>4</sub> export values 5/	NA	\$119	\$112	\$106
H <sub>2</sub> SO <sub>4</sub> import values: 5/				
Canada	NA	\$25	\$26	\$26
Europe	NA	--	\$16	\$12
Average	NA	\$30	\$31	\$23

p/ Preliminary. NA Not available.

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

3/ Includes other countries not listed.

4/ Because trade data was not available, March consumption was not determined.

5/ Average value per ton for most recent data available.